# STATEMENT OF WORK REMEDIAL DESIGN OVERSIGHT NEW CASSEL/HICKSVILLE GROUND WATER CONTAMINATION SITE – OPERABLE UNIT 1 NASSAU COUNTY, NEW YORK

#### Introduction

This Statement of Work (SOW) describes the Government's requirements for oversight of the Remedial Design (RD) for Operable Unit 1 (OU1) of the New Cassel/Hicksville Ground Water Contamination Superfund Site (Site), which is being implemented by the Potentially Responsible Parties (PRPs) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA).

## **Site Description**

The New Cassel/Hicksville Ground Water Contamination Superfund site (Site) comprises a widespread area of groundwater contamination within the Towns of North Hempstead, Hempstead, and Oyster Bay, Nassau County, New York. The Site is currently estimated to include approximately 6.5 square miles that has been characterized by volatile organic compound (VOC) contaminated groundwater that has impacted several water supply wells, including four Town of Hempstead wells (Bowling Green 1 and 2, Roosevelt Field 10, and Levittown 2A), six Hicksville water supply wells (4-2, 5-2, 5-3, 8-1, 8-3, and 9-3), and one Village of Westbury water supply well (11). Analytical results of groundwater samples from the Site have revealed concentrations of VOCs in excess of the EPA's promulgated health-based protective maximum contaminant levels (MCLs), which are enforceable standards for various drinking water contaminants and New York State's standards.

Cleanup of the Site will be addressed in discrete phases or components, and it is anticipated that there will be multiple OUs for the Site. EPA selected an interim remedy for OU1, the area downgradient of the New Cassel Industrial Area (NCIA) and Old Country Road, in a Record of Decision (ROD) signed September 2013. EPA's selected remedy for OU1 includes, among other components, a combination of in-situ treatment of groundwater via in-well vapor stripping and extraction of groundwater via pumping and ex-situ treatment of extracted groundwater prior to discharge to a publically owned treatment works or reinjection to groundwater; and in-situ chemical treatment, as appropriate The remedy selected for OU1 is intended to, among other things; minimize further migration of contaminants (primarily tetrachloroethene, trichloroethene, and 1,1,1-trichloroethane) while an investigation of OU3 is conducted. EPA intends that a Remedial Investigation/Feasibility (RI/FS) for OU3, is an area of groundwater contamination in the far-field area downgradient of OU1, will be conducted concurrently with the OU1 RD. Limited characterization has been conducted within OU3. EPA anticipates that the investigation

of OU3 will lead to a remedy selection process that would be consistent with the actions set forth in the ROD for OU1.

Individual facilities within the NCIA are considered to be among the sources of groundwater contamination for OU1 and subsequently OU3. The NCIA was developed for industrial use during the 1950s through the 1970s and remains densely populated with an estimated 200 industrial and commercial properties. Review of Nassau County Department of Health and New York State Department of Environmental Conservation (NYSDEC) reports indicates that leach pools and/or dry wells located on upgradient properties in the NCIA were generally used for disposal of wastewater at these facilities until sewers were installed. Source areas within the NCIA continue to be overseen by NYSDEC under its state hazardous waste cleanup program. The on-going, State-authorized response actions at the NCIA facilities are not part of OU1 and/or OU3, although the successful completion (*i.e.*, source control or cleanup) of addressing the source area(s) at the upgradient individual NCIA facilities, under NYSDEC oversight are anticipated and were assumed in evaluating the potential for attaining the objectives of the selected remedial alternative for OU1.

The U.S. Army Corps of Engineers (ACOE) will be conducting RI/FS activities to characterize contamination at the Sylvania property and downgradient groundwater (OU2) in Hicksville, New York. ACOE is conducting RI/FS activities at OU2 under their Formerly Utilized Sites Remedial Action Program (FUSRAP) as the Sylvania property was formerly utilized for the manufacture of federal government and commercial nuclear elements for reactors used in research and electric power generation.

## Purpose

The purpose of this SOW is to describe the requirements for oversight of the remedial design of EPA's selected remedy for OU1, which will be developed by the PRPs. The primary objective of this work assignment for PRP oversight is to ensure the remedy as specified in the remedial design protects public health and the environment, and is implemented in compliance with the terms of the Record of Decision (ROD) dated September 30, 2013, and the Unilateral Administrative Order (Order) covering this remedial design. The requirements of this work assignment call for the contractor to observe and document whether the PRPs have complied with all applicable laws, regulations, and requirements, and have met all performance standards specified in the ROD and the Order for the remedial design.

# **General Requirements**

The contractor shall perform oversight of this remedial design in accordance with this statement of work. The objective of this SOW is to ensure consistency with the ROD dated September 30, 2013, the Order for this remedial design, the *Remedial Design/Remedial Action Handbook* (EPA 540/R-95/059, June 1995) and all other guidance used by EPA in conducting a remedial design and remedial action. In all cases, the contractor shall use the most recently issued guidance.

The contractor shall furnish all necessary and appropriate personnel, materials, and services needed for performing and completing this oversight work assignment. EPA will monitor and oversee the contractor's activities throughout the development of the remedial design. EPA will also oversee the activities of the Settling Defendants' contractor throughout this project, to carry out its responsibilities to provide effective protection of the environment and public health and welfare.

Attachment 1 is a summary and prospective schedule for submittal of the major deliverables. A final schedule for submittal of these deliverables will be established as part of the approved work plan for this assignment. EPA will review all deliverables prior to acceptance to determine whether the performance requirements of this work assignment have been met, whether all performance requirements applicable to this remedial design have been identified and implemented correctly, and to assess the likelihood that the remedial design will achieve the ROD's remediation objectives. Acceptance of deliverables by EPA does not relieve the contractor of responsibility for the adequacy of the deliverables in accordance with contract requirements.

The contractor shall communicate at least bi-weekly with the EPA work assignment manager (WAM), either in person or through conference calls, to report on oversight progress. The contractor shall notify the EPA WAM, project officer, and contracting officer when 75 percent of the expenditure limit for this work assignment has been expended and provide a project estimate at completion, in accordance with Clause B.9, "Special Limitation of Cost provision for Work Assignments."

## **EPA Primary Contact**

The primary contact for this work assignment is Jennifer LaPoma, the Work Assignment Manager (WAM). She can be reached at (212) 637-4328 or by e-mail at <a href="mailto:lapoma.jennifer@epa.gov">lapoma.jennifer@epa.gov</a>. The secondary contact is Keith Moncino, the PO. He can be reached at (212) 637-4353 or by e-mail at <a href="mailto:moncino.keith@epa.gov">moncino.keith@epa.gov</a>.

#### **Green Remediation**

Green Remediation is the practice of considering all environmental effects of remedy implementation and incorporating options to maximize the net environmental benefit of cleanup actions. In accordance with EPA's strategic plan for compliance and environmental stewardship, the Agency strives for cleanup programs that use natural resources and energy efficiently, reduce negative impacts on the environment, minimize or eliminate pollution at its source, and reduce waste to the maximum extent possible. The EPA Region 2 Superfund Program supports the adoption of "green site assessment and remediation," which can be defined as the practice of considering all environmental impacts of remedy studies, selection and implementation, and incorporating strategies to maximize the net environmental benefit of cleanup actions (refer to <a href="http://www.clu-in.org/greenremediation">http://www.clu-in.org/greenremediation</a>).

To the extent practicable and/or feasible, the contractor shall explore and implement green remediation strategies for work assignments under this contract to maximize sustainability, reduce energy and water usage, promote carbon neutrality, promote industrial materials reuse and recycling, protect and preserve land resources through green applications. The contractor shall present green remediation options and approaches in the work plans, provide a cost analysis for these options in the work plan budgets, maintain records of green related activities, and report this information to EPA, as needed.

The contractor can also refer to the following documents, checklists, and guidance to assist with understanding and implementing Green Remediation practices:

- Attachment 2, "Green Remediation Practices"
- Federal Acquisition Regulation, Part 23, "Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace:" FAR Subparts 23.2, 23.4, 23.7, and 23.8 (see <a href="http://www.arnet.gov/far/05-23-1/html/FARTOCP23.html">http://www.arnet.gov/far/05-23-1/html/FARTOCP23.html</a>)
- Executive Order 13423, "Strengthening Federal Environmental, Energy, and Transportation Management" (January 2007) (see http://www.epa.gov/oaintrnt/practices/eo13423.htm)

## **Electronic Data Deliverable (EDD) Requirements**

Region 2 has adopted the standardized electronic data deliverable (EDD) format in order to streamline the electronic submittal of environmental sampling data. The EDD format is required for all new and historic data submitted to the Region. The contractor shall provide electronic submittal of field sampling and laboratory analytical results, geologic data, and well location data in accordance with Region 2's policies, guidelines, and formats.

Region 2's "Comprehensive Electronic Data Deliverable Specification Manual 1.4" (July 2009) explains the systematic implementation of EDD within Region 2, and provides detailed instructions of data preparation and identification of data fields required for data submissions. Additional Region 2 EDD guidance and requirements documents, including the "Electronic Data Deliverables Valid Values Reference Manual" and tables, the "Basic Manual for Historic Electronic Data," the "Standalone EQuIS Data Processor User Guide," and EDD templates, can be found at <a href="http://www.epa.gov/region02/superfund/medd.htm">http://www.epa.gov/region02/superfund/medd.htm</a>.

## **Record-Keeping Requirements**

The contractor shall maintain all technical and financial records for this WA in accordance with the requirements of this contract and the technical direction of the WAM. These technical and

financial records must be in sufficient detail to support decisions made during the RD, as well as cost recovery actions. At the completion of the work assignment, the contractor shall submit one copy of the major deliverables in electronic format to the EPA WAM with one copy to the EPA Records Manager, pursuant to the requirements of Clause D.1, Electronic Submission of Deliverables.

## **Work Assignment Completion and Closeout**

At the completion of this work assignment, the contractor shall perform all necessary project closeout activities as specified in this statement of work and the contract. These activities include closing out any subcontracts, indexing and consolidating project records and files, and providing a technical and financial closeout report to EPA. Final costs shall be reported to EPA (in hardcopy and electronic formats), broken down by cost element for each subtask of the work breakdown structure identified in this statement of work.

## Task 1 Project Planning and Support

## 1.1 Project Administration

The contractor shall provide the project administration and management support in the performance of this WA. Project administration activities shall include:

- Preparation of the monthly progress report
- Review of weekly financial reports
- Review and update project schedule
- Weekly communication with EPA WAM
- Preparation of staffing plans

## 1.2 Attend Scoping Meeting

The contractor shall contact the EPA's WAM within five calendar days after receipt of the work assignment to schedule a scoping meeting and inform the WAM how many contractor personnel will need to attend. This meeting will be held at the EPA Region 2 office in New York, within 30 calendar days after the issuance of this WA. The contractor shall prepare meeting minutes, which shall include the contractor's understanding of all agreements reached and any issues requiring resolution, for review by the WAM, PO and CO.

## 1.3 Conduct Site Visit

The contractor shall conduct a 1-day site visit during the project planning phase to develop a conceptual understanding of the Site and the RD scope and requirements. The contractor shall inform the WAM prior to the site visit how many contractor personnel will need to visit the Site.

## 1.4 <u>Develop Draft RD Oversight Work Plan and Cost Estimate</u>

The contractor shall prepare and submit a draft RD oversight work plan and budget in accordance with contract requirements within 30 days after the scoping meeting. The contractor shall use appropriate EPA guidance as the basis for preparing the RD oversight work plan and budget.

In preparing the work plan, the contractor shall place particular emphasis on requirements for proper coordination and sequencing of its oversight activities with EPA and PRP RD activities. The contractor shall submit one copy of the work plan and budget to the contracting officer, project officer, and WAM.

The remedial design oversight work plan shall include a comprehensive description of project tasks, the procedures to accomplish them, project documentation, and a proposed project schedule. The contractor shall use its approved quality assurance/quality control (QA/QC) systems and procedures to assure that the work plan and other deliverables are of professional quality. The work plan shall include the following:

- Identification of RD project elements and associated oversight requirements, including project planning; review of PRP planning, design, and activity reporting documentation; field sampling and analysis. The contractor shall implement a detailed work breakdown structure for this RD oversight project, organized in accordance with the work breakdown structure in this statement of work.
- The contractor's technical approach to each task to be performed, including a detailed description of each task; the assumptions used; information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to EPA. Information shall be presented in a sequence consistent with the work breakdown structure in this SOW.
- A proposed schedule with specific dates for completion of each required activity and submission of each deliverable required by the SOW. This schedule shall also include information regarding timing, initiation, and completion of all critical path milestones for each activity and deliverable and the anticipated review time for EPA.
- A list of key contractor personnel providing support on the work assignment.

In conjunction with preparation of the draft RD oversight work plan, the contractor shall prepare and submit a draft work.

## 1.5 Negotiate and Prepare Final Work Plan and Budget

The contractor shall participate in a RD oversight work plan negotiation meeting at the Region 2 New York office in person or by teleconference. EPA and the contractor will discuss and negotiate the costs required to accomplish the tasks described in the draft RD oversight work plan implementing the requirements of this SOW. The contractor shall submit a final RD oversight work plan incorporating all EPA review comments and a final work plan budget incorporating the agreements made in the negotiations. The final RD oversight work plan budget shall include a summary of the results of the negotiations. The contractor shall submit the revised RD oversight work plan and budget in both hardcopy and electronic formats.

The contractor shall not proceed with the performance of the work called for in the approved work plan until formally directed to do so by EPA.

## 1.6 Evaluate Existing Data and Documents

The contractor shall research and review available background information and documentation pertaining to the Site, including all studies and investigations performed at the Site, as provided or identified by the WAM. As part of this effort, the contractor shall evaluate the following documents:

- EPA files and records
- Files and records from the U.S. Geological Survey, Army Corps of Engineers, and other Federal sources
- Files and records from the NYSDEC, New York Department of Health, and other county and local sources.

## 1.7 Quality Assurance Project Plan

The contractor shall review and comment on the PRP's Quality Assurance Project Plan to ensure it covers the requirements for conducting the field investigation oversight under this work assignment. The contractor shall ensure the QAPP is prepared in accordance with the "Uniform Federal Policy for Quality Assurance Project Plans" (EPA-505-B-04-900A, March 2005) and the current EPA Region 2 RAC QAPP guidance and procedures, and the PRP's contractor's quality management plan.

# 1.8 <u>Health and Safety Plan</u>

The contractor shall make use of the Health and Safety Plan (HASP) prepared by the PRP, as necessary, in order to cover the requirements for conducting the field investigation oversight under this work assignment. The HASP shall cover current requirements for employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan, in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 1(1) and (1)(2). This HASP shall describe the contractor's current health and safety protocols for all field activities.

# 1.9 <u>Non-RAS Analyses</u> – **Optional**

At the direction of EPA, the contractor shall develop an EPA-approved laboratory quality assurance program that provides oversight of in-house and subcontracted laboratories through periodic performance evaluations, sample analyses and/or on-site audits of operations, and prescribes a system of corrective actions to be implemented in cases where the laboratory's performance does not meet the standards of this program. This will include at a minimum:

- \$ Prepare Laboratory Services Requests (e.g., statements of work) for all non-RAS parameters. The Laboratory Services Request(s) shall include the following elements:
  - digestion/analytical methods
  - data deliverable requirements
  - quality control (QC) requirements
  - estimated number of samples
  - method restrictions and penalties for non-compliance
  - turn-around times
- \$ Develop QC criteria for each parameter of the approved site-specific or contract-wide QAPP that will be incorporated into the Laboratory Service Request.

The contractor shall comply with all applicable and appropriate requirements in the acquisition and management of subcontracts for analytical services, including the requirements, terms, and conditions of this contract; the subcontractor=s corporate standard operating procedures; and the applicable requirements of the Federal Acquisition Regulation (FAR), Environmental Protection Agency Acquisition Regulation (EPAAR), and other relevant Federal and Agency acquisition requirements.

At the request of the EPA WAM, the contractor shall submit the Laboratory Services Request for EPA review prior to solicitation of an analytical services subcontract. This subtask is considered optional. The contractor shall provide Non-Routine Analytical Services upon direction from EPA.

1.10 Meetings/Weekly Conference Calls

The contractor shall participate in technical/progress meetings during the course of this work assignment. For budgeting purposes, the contractor shall assume that 2 meetings for the RD oversight project will be held either at the EPA Region 2 New York office, or the Site, and lasting

approximately 4 hours. The contractor shall assume 1 meeting in EPA offices and/or 1 meetings on site. The contractor shall submit minutes of each meeting, documenting the decisions and summarizing the discussions with EPA, the PRPs, and/or other Federal, New York State and local government representatives. Minutes of each meeting will be submitted to the EPA WAM within 5 calendar days after each meeting.

The contractor shall lead and participate in weekly conference calls with EPA to discuss the activities and strategy associated with the execution of the RD. Each weekly conference call will include all personnel relevant to the issues discussed. Minutes will be recorded and transmitted by the contractor to the EPA WAM within 5 calendar days after each weekly call.

## 1.11 Subcontract Procurement

The contractor shall identify, solicit and award the subcontracts necessary to perform the requirements of the SOW. The contractor shall describe the subcontracts needed for this work assignment as part of its work plan and budget. All subcontract procurement activities shall be performed under this subtask.

## 1.12 Perform Subcontract Management

The contractor shall perform management and oversight of any subcontracts needed for performance of this work assignment. The contractor shall institute procedures to monitor progress and maintain systems and records to ensure that the work proceeds in accordance with the requirements of this work assignment and the contract. The contractor shall review and approve subcontractors' invoices and issue any necessary subcontract modifications.

## Task 2 Community Relations

This task covers technical support provided by the contractor during public meetings and availability sessions conducted under this work assignment. The contractor shall provide community relations support to EPA throughout the RI/FS oversight in accordance with the *Superfund Community Involvement Handbook* (EPA 540-K-05-003, April 2005).

- 2.1 <u>Community Interviews</u> *Not Applicable*
- 2.2 Community Relations Plan Not Applicable
- 2.3 Public Meeting Support

The contractor shall perform the following activities in support of public meetings, availability sessions, and open houses under this work assignment:

- Scope meeting locations, as necessary, and make reservations for a meeting space, per the technical direction of the EPA.
- Attend public meetings and availability sessions, and prepare meeting summaries.
   Assume that two public meetings and two public availability session will be held.
- Develop draft visual aids (i.e., transparencies, slides, and handouts). Assume that 20 overhead transparencies, 3 poster board size displays, and 100 handouts will be required for each public meeting. The contractor shall prepare final visual aids incorporating all EPA review comments.
- Reserve a court reporter for each public meeting. The contractor shall provide a full-page original and a "four on one" page copy, along with an electronic version of the transcripts, with additional copies placed in the information repositories by EPA.
- Prepare and maintain a sign-in sheet for each public meeting, per the direction of EPA. The contractor shall make use of the names provided on the sign-in to update the mailing list (see Subtask 2.8).

## 2.4 Fact Sheet Preparation

The contractor shall prepare draft fact sheets, in accordance with the approved community relations plan for this work assignment and the technical direction of the EPA WAM. For budgeting purposes, the contractor shall assume 3 fact sheets (2 fact sheet for each public meeting and 1 for a public availability session), 2 to 4 pages in length, with 4 illustrations per fact sheet. The contractor shall edit, layout, and color photocopy the fact sheets. The EPA WAM will review the fact sheets and EPA comments shall be incorporated in the final version. The contractor shall attach mailing labels to the final fact sheets before delivering them to EPA, from where they will be mailed.

## 2.5 Proposed Plan Support – *Not Applicable*

## 2.6 Public Notices

The contractor shall prepare public notices/newspaper announcements in the most widely read local newspaper(s), in support of the public meetings, as directed by the EPA WAM. For budgeting purposes, the contractor shall assume that three public notices/newspaper advertisements will be placed in support of the public meetings and/or public availability sessions conducted under this work assignment. The contractor shall budget for placement of two newspaper advertisements for each public notice, with each advertisement/public notice placed in both a large area-wide newspaper and a small local newspaper.

## 2.7 <u>Information Repositories</u>

The local repository will be the Westbury Public Library, 445 Jefferson Street, Westbury, New York. EPA anticipates that another local repository will be established for the Site.

The contractor shall update and maintain the local site information repository, at the request of the EPA WAM, for the duration of the work assignment. The contractor shall assume two repository updates for two information repositories. The above repository will contain the Administrative Record for the Site. All reports shall be made available on electronic format for the Site repository.

## 2.8 Site Mailing List

The contractor shall update the mailing list used for community relations activities for this site. For budgeting purposes, the contractor shall assume that EPA's current mailing list will be initially updated and that there will be three additional updates, and that the mailing list will contain about 2,000 entries. At the request of the EPA WAM, the contractor shall provide a copy of the mailing list on a CD and mailing labels for each mailing. EPA will do the actual mailing of any information to the community.

## Task 3 Field Oversight and Data Acquisition

This task covers the contractor's oversight of the PRP's work efforts and related field sampling during the PRP's performance of the RD. The plans describing requirements for collection of field data are described in Task 1. Data acquisition under this task starts with EPA's approval of the RD work plan and QAPP prior to initiation of RD field oversight activities, and ends with the demobilization of field personnel and equipment from the site after the PRP design investigation.

## 3.1 <u>Mobilization and Demobilization Oversight</u>

The contractor shall oversee the PRP's mobilization/demobilization effort. The contractor shall mobilize its personnel, equipment, and supplies necessary for field oversight activities at the site. Upon the PRP demobilization at the end of the field investigation, the contractor shall demobilize from the site. For budgeting purposes, the contractor shall assume that one mobilization and one demobilization will be required.

## 3.2 Remedial Design Field Oversight

The contractor shall implement procedures and perform activities necessary to ensure the proper management of PRP field investigation activities, including implementation and execution of accurate chain-of-custody procedures and other applicable requirements for sample tracking, protective sample packing, and proper sample-preservation. The contractor shall also ensure that the PRP's characterizes and disposes of investigation-derived wastes in accordance with local,

State and Federal regulations as specified in the PRP's QAPP (see also the *Guide to Management of Investigation-Derived Wastes*, OSWER 9345.3-03FS, January 1992).

## 3.2.1 Field Investigation Oversight

The contractor shall provide technical oversight of PRP activities to ensure the field investigation takes place in accordance with the EPA-approved work plan, quality assurance project plan, health and safety plan, and other applicable requirements. Oversight activities include observing and recording compliance with specific aspects of the RD work plan (as requested by the EPA WAM), photographing certain field activities, maintaining a daily field logbook, and providing reports to the WAM. In addition, the contractor's field personnel shall attend any [progress meetings between the PRPs and/or the PRP's consultants and contractor(s), which may be located on-site. The contractor shall report any instance of the PRP non-conformance with these approved planning documents to the EPA WAM. The contractor shall communicate with the WAM by telephone at least once per week during the PRP field work

The contractor shall keep a field logbook to document the progress of the pre-remedial design field work. The logbook shall be marked "Enforcement Confidential" and shall be signed and dated at the end of each day of field activities by the contractor's field personnel. The contractor shall record the following information, at minimum, in the logbook each day during field work:

- Time, date, location and weather conditions
- Visual characterization/description of site conditions
- Listing of all on-site personnel (full name, position, and employer)
- Sample collection procedures and sample description
- Description of any issues, problems, inconsistencies or non-compliance by the PRP's

contractor(s) with the approved RD work plan and protocols, including the QAPP and HASP

## 3.2.2 Split sampling

The contractor shall collect approximately 10% of the split samples for analysis during RD. The contractor shall coordinate with and utilize the EPA's Contract Region Lab (CRL) wherever and whenever possible.

The contractor shall use the PRP RD work plan and schedule to determine the length of the PRP's field investigation and the specific needs for oversight of the PRP contractor. If the

PRP's RD work plan and schedule have not been approved prior to the time for submittal of the contractor's draft work plan, the contractor shall assume that the PRP field investigations will take place over a period of 15 (fifteen) weeks.

## 3.3 Prepare Field Investigation Oversight Periodic Reports

The contractor shall provide field oversight reports weekly for the duration of the PRP field work. The contractor's field oversight reports shall include a short summary of significant field events during the period, any deviations to the approved work plan during the period, photographic documentation, and a copy of all field logs. The contractor shall submit each field oversight report within two calendar days after each weekly period.

# 3.4 Prepare Final Field Investigation Oversight Summary Report

The contractor shall provide a summary field oversight report within thirty (30) calendar days after the end of all field activities. The final field oversight report shall include a summary of the oversight activities performed and reported by the contractor, photographs taken during the field work and a description of final oversight activities, including oversight of the PRP demobilization effort.

## Task 4 Analysis of Split Samples

The contractor shall arrange for the analysis of environmental samples collected during Task 3. This

task includes only the cost of the sample analysis. Efforts associated with sample collection is included in Task 3, efforts associated with shipment and validation are included in Task 5, and efforts associated with data evaluation are included in Task 6.

## Task 5 Data Validation of Split Samples

The contractor shall arrange for the analysis and perform the validation of environmental split samples collected under Task 4. Sample validation under this task begins with the completion of the RD field sampling program and reservation of sample slots in the CLP (or procurement of the Non-RAS laboratory, as applicable), and ends with the contractor's validation of the analytical data received from the laboratory. The contractor shall perform the following activities under this task:

## 5.1 Prepare and Ship Environmental Samples

The contractor shall collect, prepare, and ship environmental samples collected under Task 3 in accordance with the approved QAPP prepared under Task 1.

## 5.2 Sample Management/Coordination with the Appropriate Sample Management Personnel

The contractor shall coordinate with appropriate sample management personnel (Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD)) regarding analytical, data validation, and quality assurance issues.

## 5.3 Data Validation

The contractor shall validate the data to ensure that the data and chain-of-custody procedures are accurate and defensible. The contractor shall perform the following activities under this subtask:

- Review analysis results against validation criteria
- Review the data and make a data usability determination
- Complete the necessary summary tables, validation worksheets, and DQO summary forms
- The contractor shall develop and submit a Data Validation Report to the WAM within 21 (twenty one) calendar days after all of the last analytical data have been validated.

## Task 6 Data Evaluation of Sample Analysis

This task covers compilation and comparison of the PRP-generated data that will be used in the OU1 RD with data resulting from the analysis of split samples. The contractor shall compare, evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. The contractor shall prepare an environmental database that includes historical data as well as data collected as part of the RD. The environmental database will have the capability of sorting the data in order to perform a detailed comparison of the various types of sampling data collected as part of the environmental investigations performed at the site. Data evaluation will begin with the receipt of PRP-generated data that will be used in the RI to be provided by the EPA WAM.

## 6.1 <u>Data Usability Evaluation and Field QA/QC</u>

The contractor shall evaluate the usability of the historical sample data, PRP-generated data, as well as the data acquired as part of this assignment, including any uncertainties associated with the data, and apply the appropriate QA/QC protocols to evaluate whether such data are appropriate for their intended use.

## 6.2 Data Reduction, Tabulation, and Evaluation

The contractor shall evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. The following shall be used as general guidelines in the preparation of data for subsequent evaluation/interpretation:

- Tables of analytical results should be organized in a logical manner such as by sample location number, sampling zone, or some other logical format. Groundwater analytical results shall be separated into groups based on the hydrogeologic framework such as shallow aquifer upgradient, deep aquifer upgradient, shallow aquifer downgradient and deep aquifer downgradient. Well identification numbers within each set could be ordered according to whatever alpha-numeric system is used for the well identification numbers. Surface/subsurface soil analyses shall be separated according to site location or specific contaminant source and background areas. The contractor shall coordinate the table organization with the EPA WAM.
- Analytical results shall not be organized by laboratory identification numbers because these numbers do not correspond those used on sample location maps. The sample location/well identification number shall always be used as the primary reference for the analytical results. The sample location number shall also be indicated if the laboratory sample identification number is used.
- Analytical tables should indicate the sample collection dates.
- The detection limit shall be indicated in instances where a parameter was not detected.
- Analytical results shall be reported in the text, tables and figures using a consistent convention such as ug/L for groundwater analyses and mg/kg for soil analyses.
- The lead agency's protocol for eliminating field sample analytical results based on laboratory/field blank contamination results shall be clearly explained.
- Discussion of approved sampling results shall not be qualified by suggesting that a particular chemical is a common lab contaminant or was detected in the lab blank. If the reported result has passed QA/QC it shall be considered valid. In cases where the chemical in question was known to have been used and/or disposed of on site, positively identified at high levels in other environmental media, and passes QA/QC protocols, the sampling results shall not be questioned as being due to laboratory contaminants.
- Field equipment rinsate blank analyses results shall be discussed in detail if decontamination solvents are believed to have contaminated field samples.
- The deliverable from this task shall be an environmental database that integrates both historic sampling data with the sampling data obtained by the contractor and PRP as a result of the OU1 RD.
- 6.3 Modeling Oversight

The contractor shall provide technical support to EPA with regards to determining the necessity for modeling efforts undertaken by the PRP in support of RD activities. The contractor shall provide support and recommendations to EPA on the need for modeling to complete and accurate depiction of the nature and extent of contamination, distribution and movement of site contamination. The contractor shall assume modeling support as part of the work plan budget for this subtask. If modeling is undertaken by the PRPs, the contractor shall provide technical support, which shall include review and comments on modeling specific memorandums and outputs. The contractor shall assume modeling support as part of the work plan budget for this subtask.

## 6.4 Technical Memorandum (Data Evaluation Report)

The contractor shall provide a technical memorandum to the EPA WAM summarizing the results of this evaluation (under Task 6). The report will include a presentation and discussion of the split sample analytical results, a comparison of the split sample data with the PRP's data, and a discussion of any discrepancies. Upon receipt of final analytical results from laboratory, the contractor shall provide EPA with a draft Data Evaluation Technical Memorandum within 45 days.

## Task 7 Review of PRP Remedial Design Documents

This task covers requirements for review and comment on the PRP's remedial design submittals. The contractor shall perform reviews evaluating the technical and engineering merit of the PRP documents. After receipt of each PRP submittal, the contractor shall submit a report summarizing the results of its review, identifying specific issues of concern and describing recommended corrective actions. The documents to be evaluated under this task comprise the Pre-Design Investigation and Remedial Design Work Plans, the Pre-Design Investigation Memorandum, the preliminary and final remedial design reports (including all appendices), and the remedial action drawings, plans and specifications. In reviewing these submittals, the contractor shall evaluate whether each submittal satisfies the requirements of the following documents and policies:

- \$ Record of Decision and Order for the remedial design
- \$ Compliance with ARARs
- \$ Standard professional engineering practices
- \$ Applicable statutes, EPA policies, directives and regulations

## 7.1 Review PRP Remedial Design Documents

The contractor shall review the PRP's remedial design draft and final reports, including all appendices, and the remedial design plans and specifications. This review shall cover all documents to be submitted by the PRPs in accordance with the Order and associated Remedial Design statement of work. The contractor shall evaluate the PRP's draft and final design reports (including all appendices) and the remedial design plans and specifications to assess whether these documents satisfy the requirements of the Record of Decision, Order, and other documents listed

above, as well as to assess whether the construction schedule will meet the completion goals for this remedial action. In its review of the PRP's remedial design documents, the contractor shall evaluate the specific technical and engineering aspects of the detailed design-related submittals, identify specific issues and problems, and describe suggested revisions and/or corrective actions. The PRP documents, draft and final, to be reviewed under this subtask are as follows:

- Pre-Design Investigation Work Plan
- Pre-Design Investigation Memorandum
- Remedial Design Work Plan
- Quality Assurance Project Plan
- Health and Safety Plan
- Plans and schedules for RD and RA implementation
- "Green" strategy for implementation of RD/RA
- Construction Quality Assurance Project Plan
- Remedial Design Reports (35%, 65%, 95%, Final)

The contractor shall provide its review comments on the PRP's document identified in Section 7 (including all supplemental documents), plans and specifications, including all appendices, within 30 business days of receipt of each document.

## **Task 8** Technical Meeting Support

This task covers technical support activities for meetings between EPA, the PRPs, and the PRP's contractors. The contractor shall attend meetings during the performance of this work assignment, in addition to the meetings specifically addressed under other subtasks in this statement of work, and document the proceedings and results of these meetings. These meetings may be scheduled to coincide with specific milestones during the remedial design.

## 8.1 <u>Technical Meeting Support</u>

For budgeting purposes, the contractor shall assume that EPA will hold three meeting with the PRPs and project stakeholders at the EPA Region 2 New York office. It is anticipated that 2 - 3 contractor personnel will attend this meeting, and that the meeting will last approximately 3 hours. The contractor shall submit minutes of this meeting for review by the EPA WAM within 5 calendar days after the meeting.

## Task 9 Work Assignment Closeout

Upon notification from EPA that the technical work under the work assignment is complete, the contractor shall perform the activities necessary to close out this work assignment in accordance with contract requirements. After WA closeout activities have been completed, the contractor

shall retain its WA files in accordance with Clause H.38, "Retention and Availability of Contractor Files," of Contract EP-W-09-002.

# 15.1 <u>Document Indexing</u>

The contractor shall organize the work assignment files in its possession in accordance with the current approved EPA file index structure [e.g., Administrative Record Index, EPA Superfund Site File Index, and/or ARCS Guidelines for Closeout of Work Assignments]. For the Superfund program, Section 113(k)(1) of CERCLA, as amended by SARA, requires EPA to establish an Administrative Record (AR) that contains all of the information considered by the Agency in selecting a response action. The AR for the selection of a remedial action or response decision must be made available for public inspection at the commencement of the remedial investigation phase. The format to be used in compiling ARs is outlined in the memorandum from Don R. Clay, former Assistant Administrator, OSWER, entitled "Final Guidance on Administrative Records for Selecting CERCLA Response Actions," dated December 3, 1990. EPA will provide the specific index format prior to closeout of this work assignment.

## 15.2 Document Retention/Conversion

At the completion of the assignment, the contractor shall submit one copy of the major deliverables in electronic format (Word, Excel, and PDF, where appropriate) to the EPA Records Manager.

Attachment 1
Summary of Major Submittals for RI/FS Oversight
New Cassel/Hicksville Ground Water Contamination Superfund Site OU1

TASK	DELIVERABLE	Number of Copies	DUE DATE (calendar days)
1.2	Scoping Meeting Minutes	1 E, 1H	5 days after scoping meeting
1.4	Draft Remedial Design Oversight Work Plan and Draft Budget	1E, 1H	30 days after scoping meeting
1.5	Final Remedial Design Oversight Work Plan and Budget	1E, 1H	15 days after conclusion of negotiations
1.7	Review of Quality Assurance Project Plan (QAPP)	1E	30 days after receipt of PRP RI/FS Work Plan

1.7	Review of Revised QAPP	1E	15 days after receipt of EPA comments on Draft QAPP
1.8	Review of Health and Safety Plan (HASP)	1E	30 days after receipt of RI/FS Work Plan
1.8	Review of Revised HASP	1E	15 days after receipt of EPA comments on draft HASP
1.10	Meeting Minutes	1E	5 days after each meeting
7.1	Review of PRP's Draft Pre-Design Investigation Work Plan	1E	30 days after receipt of PRP's Draft Work Plan
7.1	Review of PRP's Final Pre-Design Investigation Work Plan	1E	20 days after receipt of PRP's Final Work Plan
7.1	Review of PRP's Draft Pre-Design Investigation Memorandum	1E	30 days after receipt of PRP's Draft Memorandum
7.1	Review of PRP's Final Pre-Design Investigation Memorandum	1E	20 days after receipt of PRP's Final Memorandum
7.1	Review of PRP's Draft Remedial Design Work Plan	1E	30 days after receipt of PRP's Draft Work Plan
7.1	Review of PRP's Final Remedial Design Work Plan	1E	20 days after receipt of PRP's Final Work Plan
7.1	Review of PRP's 35% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's 65% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's 95% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's Final Remedial Design Report	1E	20 days after receipt of PRP Report
2.4	Fact Sheets	1E, 1H	15 days from request from EPA WAM
2.6	Public Notices	1E, 1H	14 days prior to each public meeting or availability session
2.8	Site Mailing List	TBD	TBD as finalized in approved work plan performance schedule

DRAFT – INTERNAL REVIEW- NOT FOR RELEASE

3.3	Field Investigation Oversight Weekly Reports	1E	2 days after each weekly period
3.4	Field Investigation Oversight Final Summary Report	1E, 1H	30 days from completion of all field activities
6.1	Data Usability Report	1E, 1H	21 days after receipt of final analytical results from laboratory
6.4	Data Evaluation Report	1E, 1H	45 days from receipt of final analytical results from laboratory
6.3	Review of PRP's Modeling Deliverable	1E	TBD
6.3	Review of PRP's Revised Modeling Deliverable	1E	TBD
15.2	Document Retention/.Conversion	1E	Within 60 days of EPA notification of WA completion

Note: "E" is electronic copy whereas "H" is hardcopy

## **ATTACHMENT 2**

#### "GREEN REMEDIATION" PRACTICES

This attachment describes EPA Region 2's current basic guidelines for the contractor's evaluation and implementation of "Green Remediation" practices in the performance of remedial activities under work assignments issued for this contract. In the performance of these remedial activities, the contractor shall, to the extent practicable, explore and evaluate the use of:

<u>Clean Air</u>, through the use of cleaner technology and engines, cleaner fuel and cleaner diesel control technology on all diesel equipment used at sites during the remedial work. Clean diesel technologies are preferred, and alternative fuels such as biodiesel or natural gas-powered vehicles should also be considered. The contractor shall use alternative fuels, of at least a B20 blend or higher, on all on-site diesel equipment where these fuels are available within a reasonable distance from the Site. The contractor shall employ the most efficient emission control technology for reducing particulate matter (PM) emissions on non-road and on-road diesel powered equipment used at a site. The contractor shall use cleaner engines, which include non-road engines meeting Tier II or cleaner standards and on-road engines meeting 2004 "On-Highway Heavy Duty Engine Emissions Standards" or cleaner.

Renewable Energy Sources, when conducting work related to selection of a cleanup remedy, constructing a cleanup remedy, and upgrading or otherwise improving an existing cleanup remedy. These sources of renewable energy can include solar, wind, and biofuels. Examples of renewable energy technologies include photovoltaic panels, wind turbines, digesters, gasifiers, and microturbines. As part of evaluating renewable energy sources and technologies, the contractor shall perform cost analyses that compare the energy costs from renewable sources to costs from traditional electricity sources provided by local utilities, over the expected life of the cleanup remedy. The contractor shall also perform evaluations of the emissions prevented as a result of using renewable energy sources versus traditional energy sources provided by local utilities. Finally, the contractor shall evaluate the costs of purchasing "green power" from organizations that offer such green power within the state where the Site is located.

"GreenScapes," as a cost-efficient and environmentally friendly solution for site landscaping. The "Greenscapes" concept has been designed to help preserve natural resources and prevent waste and pollution, and encourages practitioners to make more comprehensive decisions regarding waste generation and disposal and their associated cost and environmental effects on land, water, air, and energy use. "GreenScaping" encompasses a set of landscaping practices that can improve the health and appearance of the landscape at a site while protecting and preserving natural resources by reducing or eliminating the amount of waste materials involved in groundskeeping and the amount of water, pesticides, fuels, oils, and other materials used in landscaping. The practices involved in "GreenScaping" to reduce landscaping costs include: 1) Reducing the production of waste to promote more efficient use of materials; 2) Reusing materials in order to prolong their useful life and delay their recycling and/or final disposal; 3) Recycling to minimize waste generation by recovering and reprocessing usable products that might otherwise be disposed of; and 4) "Rebuying" by making purchases that meet project needs but have a better overall effect on the environment, such as biobased, recycled content, and other environmentally elements. information "GreenScapes," preferable (For more on www.epa.gov/osw/partnerships/greenscapes/index.htm.)

Industrial Materials Reuse (IMR), involving reusing or recycling byproduct materials generated from industrial processes that can be used as substitutions for raw materials in the manufacture of consumer products, roads, bridges, buildings, and other construction projects. For example, nonhazardous industrial materials, such as coal ash, foundry sand, construction and demolition materials, slag, and gypsum, are valuable products of industrial processes that can be recycled in a variety of diverse applications. These materials have many of the same chemical and physical properties as the virgin materials they replace, and in many cases can even improve the quality of a product. Putting these commodities into productive use can save resources and energy and reduce greenhouse gas emissions. As such, the reuse and recycling of industrial materials is preferred when applicable, and may even present opportunities for revenue generation to offset remedial costs. (For more information on Industrial Materials Reuse, see <a href="https://www.epa.gov/osw/conserve/rrr/imr/index.htm">www.epa.gov/osw/conserve/rrr/imr/index.htm</a>.)